Serial Number: 10/632,138 Filing Date: July 31, 2003

Title: INTEGRATED ELECTROMAGNETIC INTERFERENCE FILTERS AND FEEDTHROUGHS

#### REMARKS

This responds to the Office Action dated December 14, 2006. Claim 1 is amended. Support for the amendment is found generally within the specification (see e.g., page 5 lines 25-30, FIG. 2B, and FIG. 4). Claims 1-26 are pending in this application.

#### Advisory Action

In the Advisory Action dated 2/27/2007, the Examiner indicated that the amendments raise the issue of new matter. Applicant respectfully disagrees.

Claim 1 recites, among other things,

one or more ceramic chip capacitors mounted on the printed circuit interconnect substrate to face inward into the hermetically scaled interior.

Page 5 lines 25 -40 of the patent application states

FIG. 4 shows an embodiment of a substrate sub-assembly 400 that includes capacitors. A front view 410 and a back view 420 are shown. The sub-assembly 400 is then mounted to the hermetic side of the feedthrough and hermetic seal assembly with the front side 410 pointing into the hermetically sealed interior of the medical device.

Note in FIG. 4 that front side 410 includes the capacitors. Applicant respectfully submits that the amendments do not introduce new matter.

### §102 Rejection of the Claims

Claims 1-6, 8-12, 15-18, and 23-26 were rejected under 35 U.S.C. § 102(e) for anticipation by Kim (U.S. Patent No. 6,778,040). Applicant respectfully traverses. The Office Action fails to establish a *prima facie* case of anticipation because Kim does not teach all of the elements presently recited in the claims. The identical invention must be shown in as complete detail as is contained in the claim.

Applicant cannot find in Kim any disclosure of, among other things,

<sup>&</sup>lt;sup>1</sup> M.P.E.P. §2131 citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1990)

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one or more ceramic chip capacitors mounted on the printed circuit interconnect substrate to face inward into the hermetically sealed interior,

as presently recited in claim 1.

Kim states that "additional pattern lines are formed on the top surface of the insulating substrate 40 so as to allow filter devices to be mounted." Kim also refers to "assigning a shielding function to a bottom surface on which filter devices are not mounted." Kim further cites U.S. Pat. No. 5,959,829 (the '829 patent) for construction of a feed-through filter. The '829 patent states that an important aspect of the invention is the location of the chip capacitors 42 directly at the point of lead penetration of the header of the implantable device, and that the efficacy of the chip capacitor filter ... is based upon the attenuation of the RF carrier before it can enter into the sealed housing for the electronic circuitry." Thus, Kim with the '829 patent describes placing filter devices, such as capacitors, on the top surface that is outside a sealed housing.

The Office Action states that Kim discloses the substrate or an insulator residing on a side of a hermetic scal.<sup>6</sup> However, Kim does not describe chip capacitors mounted on the printed circuit interconnect substrate to face inward into the hermetically scaled interior, as recited in claim 1.

Applicant respectfully requests reconsideration and allowance of claims 1-6, 8-12, 15-18, and 23-26

# §103 Rejection of the Claims

 Claims 19-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim (U.S. Patent No. 6,778,040) in view of Brendel et al. (U.S. Patent No. 6,529,103). Applicant respectfully traverses the rejection.

<sup>&</sup>lt;sup>2</sup> Kim, col. 7 lines 38-40.

<sup>3</sup> Kim, col. 1 lines 11-12.

<sup>4</sup> Kim., col. 2 lines 7-8.

<sup>5 &#</sup>x27;829 patent, col. 7 lines 34-41.

<sup>6</sup> Office Action, pg. 6.

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Claims 19-22 ultimately depend on base claim 1. As discussed above, Applicant believes claim 1 to be allowable at least for the reason that Kim does not teach or suggest all of the elements recited in the claim. The addition of Brendel fails to disclose the missing elements.

Additionally. The M.P.E.P. states that Graham v. John Deere Co. should be followed in the consideration and determination of obviousness under 35 U.S.C. § 103. The four factual inquiries enunciated in Graham include ascertaining the differences between the prior art and the claims at issue. Ascertaining the difference between the prior art and the claims at issue includes considering a reference in its entirety, including disclosures that teach away from the claimed invention.8 The '829 patent, cited in Kim as disclosing construction of a feed-through filter in detail, states that an important aspect of the invention is the location of the chip capacitors 42 directly at the point of lead penetration of the header of the implantable device, and that the efficacy of the chip capacitor filter ... is based upon the attenuation of the RF carrier before it can enter into the sealed housing for the electronic circuitry." Therefore Kim, with the '829 patent, teaches away from the subject matter recited in claim 1.

Further, proper motivation is lacking to combine Kim with Brendel. Kim refers to using chip capacitors having electrodes on one end and the other end. 10 Brendel refers to a coaxial ceramic feedthrough filter capacitor and a discoidal capacitor, 11 and that the electrode patterns of both the first and second sets of electrode plates do not extend to the outer diameter of the feedthrough capacitor. 12 Applicant submits that proper motivation is lacking to combine the chip capacitors of Kim with the Brendel device which already has coaxial feedthrough capacitors.

Applicant respectfully requests reconsideration and allowance of claims 19-22.

Claims 13-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim 2. (U.S. Patent No. 6,778,040) in view of Andresakis et al. (U.S. Patent 6,657,849). Applicant respectfully traverses the rejection.

Claims 13-14 depend on base claim 1. As discussed above, Applicant believes claim 1 to be allowable at least for the reason that Kim does not teach or suggest all of the elements recited

<sup>7</sup> M.P.E.P. 8 2141.

<sup>8</sup> M.P.E.P. § 2141.02.

<sup>9 &#</sup>x27;829 patent, col. 7 lines 34-41.

<sup>10</sup> Kim, col. 2 lines 48-53 and lines 64-67.

<sup>11</sup> Brendel, col. 1 line 66-67 and col. 2 lines 16-17.

<sup>&</sup>lt;sup>12</sup> Brendel, col. 11 lines 33-38.

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in the claim. The addition of Andresakis fails to disclose the missing elements. Additionally, as discussed previously. Kim teaches away from the subject matter recited in the claims.

Further, proper motivation to combine Kim with Andresakis has not been established. The Office Action concedes that Kim does not disclose the capacitors having a dielectric breakdown voltage of about 1200 volts, or within a range of about 200 to 1500 volts. The Office Action further states that it would have been obvious ... to have a teaching of Andresakis et al. employed in the apparatus of Kim in order to provide a high quality ceramic EMI/RFI filter capacitor applied in an electronic device. However, neither Kim nor Andresakis teach or suggest that a capacitor with such breakdown voltages results in a higher quality EMI/RFI filter capacitor for the devices they describe.

Applicant respectfully requests reconsideration and allowance of claims 13-14.

3. Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim (U.S. Patent No. 6,778,040) in view of Chee (U.S. Patent No. 6,657,133). Applicant respectfully traverses the rejection.

Claim 7 depends on base claim 1. As discussed above, Applicant believes claim 1 to be allowable at least for the reason that Kim does not teach or suggest all of the elements recited in the claim. Additionally, Kim teaches away from the subject matter recited in the claims. Applicant respectfully requests reconsideration and allowance of claim 7.

### Reservation of Rights

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are

<sup>13</sup> Office Action, pg. 4.

<sup>14</sup> Office Action, pg. 5.

### AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 - EXPEDITED PROCEDURE

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relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

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# CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6965 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Date 3-12-2007

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this T2-D day of March 2007.

John D. Gw pu-Wraphell

// Signatur

Name